

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-25. (Canceled).

26. (Previously Presented) Apparatus for use in a telecommunication system for providing access to an xDSL telecommunication service to subscribers, comprising:

plural subscriber user terminals;

plural net terminals, each user terminal being coupled to one of the net terminals, and each net terminal including a net terminal xDSL modem;

a first access point including a pool of xDSL modems;

a group of direct access xDSL modems separate from the pool of xDSL modems;

a controller configured to establish a bi-directional broadband connection between multiple user terminals to the first access point using xDSL modems from the pool of xDSL modems, and sometime thereafter, to transfer one or more of the established connections to one or more xDSL modems from the group of direct access xDSL modems.

27. (Previously Presented) The apparatus in claim 26, further comprising:

loop-back circuitry selectively coupled to one or more net terminals using patch cords.

28. (Previously Presented) The apparatus in claim 27, further comprising:

a metallic cross connect for coupling one or more of the established connections via the loop-back circuitry to a corresponding xDSL modem in the xDSL modem pool.

29. (Previously Presented) The apparatus in claim 26, further comprising:

a pool of xDSL filters, wherein the controller is configured to assign each connection established with one of the pooled xDSL modems to one of a pool of xDSL filters, the output of the assigned xDSL filter coupled to the input of the one xDSL modem.

30. (Previously Presented) An apparatus in a telecommunication system according to claims 29, wherein the pool of xDSL filters is located in the first access point.

31. (Previously Presented) An apparatus in a telecommunication system according to claims 29, wherein the pool of xDSL filters and the direct access xDSL modems are located in the second access point coupled between the first access point and the controller.

32. (Previously Presented) The apparatus in claim 26, wherein each net terminal further includes an in-band xDSL modem in addition to the net terminal xDSL modem.

33. (Previously Presented) The apparatus in claim 32, wherein prior to establishment of the bi-directional broadband connection, the in-band modem in the net terminal associated with the one user terminal is configured to establish a preliminary connection with the controller to engage the controller to initialize one of the second xDSL modems from the pool for the bi-directional broadband connection.

34. (Previously Presented) The apparatus in claim 32, wherein the in-band modem and the net terminal xDSL modem are configured to operate independently and in parallel in the net terminal.

35. (Previously Presented) An apparatus in claim 32, wherein the controller is configured to retrieve subscriber information to individualize the established connection.

36. (Previously Presented) A method for use in a telecommunication system for providing access to telecommunication services to subscribers at user terminals, each user

terminal being coupled to one of plural net terminals, and each net terminal including a xDSL modem, comprising:

transmitting a user request signal from an net terminal including a user terminal identity;
in response to the user request, searching for an available connection path at the first access point;
creating a bi-directional broadband data transmission connection between the user terminal and the first access point using one of a pool of xDSL modems at the first access point;
activating the bi-directional broadband data transmission connection between the user terminal and the first access point;
transferring the bi-directional broadband data transmission connection from the one xDSL modem from the pool to another, direct access xDSL modem.

37. (Previously Presented) The method in claim 36, wherein the transfer frees up the one xDSL modem from the pool for a bi-directional broadband data transmission connection for another user.

38. (Previously Presented) The method in claim 36, further comprising:
using an in-band modem at the net terminal, separate from the xDSL modem at the net terminal, in initially installing the bi-directional broadband data transmission connection.

39. (Previously Presented) The method in claim 36, wherein one of a pool of xDSL filters at the first access point filters a signal and provides the filtered signal to the one xDSL modem.

40. (Previously Presented) The method in claim 36, further comprising using the method in claim 28 to establish multiple bi-directional broadband connections with multiple user terminals.

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41. (Previously Presented) The method in claim 36, further comprising using the method in claim 28 to establish simultaneously multiple bi-directional broadband connections with multiple user terminals.

42. (Previously Presented) The method in claim 36, wherein the direct access modem is located in a second access point.